

WHAT IS CLAIMED IS:

1. An apparatus for dividing, compressing and transmitting video data that uses a plurality of channels for transmission, at least comprising:
 - 5 a first encoding section for encoding an original picture and transmitting it with a first channel;
 - a first compensation section for generating a first compensated original picture obtained by adding and subtracting to/from said original picture a value obtained
 - 10 by dispersing an encoding error occurred in said first encoding section to the remaining channels; and
 - a second encoding section for encoding said first compensated original picture and transmitting it through a second channel.

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2. An apparatus for dividing, compressing and transmitting video data according to claim 1, wherein when said first compensated original picture is designated as
20 $S(2)$, said $S(2)$ is expressed by the following expression
(3);

$$S(2) = \{(S(1) - C(1)) / (N-1) + S(1) \} \dots (3)$$

wherein $S(1)$ denotes an original picture, $C(1)$ denotes decoded data, and N denotes the total number of channels.

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3. An apparatus for dividing, compressing and transmitting video data according to claim 1, further comprising:

an i -th ($i = 2, 3, \dots, N-1$) compensation section for
5 generating an i -th compensated original picture obtained
by adding and subtracting to/from said original picture a
value obtained by dispersing an encoding error occurred in
an i -th encoding section to the remaining channels; and
an $(i+1)$ -th encoding section for encoding said i -th
10 compensated original picture and transmitting it through
an $(i+1)$ -th channel.

4. An apparatus for dividing, compressing and
15 transmitting video data according to claim 3, wherein when
said i -th compensated original picture is designated as $S(i+1)$, said $S(i+1)$ is expressed by the following expression
(4);

$$20 S(i+1) = \{ S(1) \times i - \sum_{k=1}^i C(k) \} / (N-i) + S(1) \quad \dots (4)$$

wherein $S(1)$ denotes an original picture, $C(k)$ denotes
decoded data, and N denotes the total number of channels.